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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/998,676

11/29/2001

Eric Wu

NA01-002

7361

28112

7590

12/23/2005

GEORGE O. SAILE & ASSOCIATES

28 DAVIS AVENUE

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EXAMINER

PHAM, TUAN

ART UNIT

PAPER NUMBER

2643

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/998,676

Applicant(s)

WU ET AL.

Examiner

TUAN A. PHAM

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2643

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 30 November 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

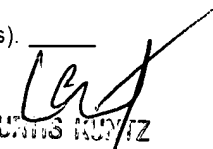
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See attached.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_

  
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## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on 11/30/2005 have been fully considered but they are not persuasive.

In response to applicant's remark on pages 13-15, Applicant argues that the combination of Zinn (Pub. No.: US 2003/0064684) and Hamada (U.S. Patent No.: 4,059,807) does not teaches: "a pulse width amplifier to receive an audio signal and modulate a pulse width of a digital timing signal with said audio signal, such that the pulse width is proportional to an amplitude of said analog audio signal to provide a pulse width modulated signal", and "an integrator in communication with the down-converter to receive the extracted pulse width modulated signal to remove a timing signal from said extracted pulse width modulated signal to restore the signal", in claims 1, 10, and 20.

In response to applicant's arguments as stated above, the Examiner respectfully disagrees with the Applicant's argument. Zinn teaches an apparatus for encoding and decoding for a receiver and transmitter that include a pulse width modulated. Zinn also teaches an integrator circuit for filtering out or removing the timing signal (i.e., triangle wave signal) from the input signal  $V_{in}$  to reform or restore the  $V_{in}$  signal (see figure 6, integrator 222, col.3, [0024]). On the other hand, Hamada teaches a pulse width amplifier to receive an audio signal and modulate a pulse width of a digital timing signal with said audio signal, such that the pulse width is proportional to an amplitude of said

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analog audio signal to provide a pulse width modulated signal (see figure 1, figure 2, input audio signal 11a, sawtooth carrier signal A, audio signal B, pulse width signal C, it is obvious that the pulse width signal is proportional to an amplitude of the analog signal that is the basic of modulator). Furthermore, Hamada also teaches acquiring the audio signal, comparing said audio signal with a timing signal, from said comparing, forming a pulse width modulated signal (see figure 2, col.2, ln.54-68).

In response to applicant's remark on page 14, Applicant argues that the combination of Zinn (Pub. No.: US 2003/0064684) and Hamada (U.S. Patent No.: 4,059,807) does not teaches: "an up-converter in communication with the pulse width amplifier to receive the pulse width modulated signal and converter the pulse width modulated signal to a modulated carrier signal', and a transmitter in communication with the modulated carrier signal to transfer the modulated carrier signal wirelessly", in claim 10.

In response to applicant's arguments as stated above, the Examiner respectfully disagrees with the Applicant's argument. Zinn teaches an apparatus for encoding for a transmitter that include a pulse width modulated, and Zinn also teaches an up-converter (read on mix-up) in communication with the pulse width amplifier to receive the pulse width modulated signal and converter the pulse width modulated signal to a modulated carrier signal', and a transmitter in communication with the modulated carrier signal to transfer the modulated carrier signal wirelessly (see figure 3, transmitter 164 is included

a mix-up for mixing-up the pulse width modulator signal before transmitting, col.2, [0026]).

In response to applicant's remark on page 20, Applicant argues that Katagishi et al. does not teaches: "power amplifier in communication with the integrator to receive the audio signal and amplify said audio signal and transfer said amplified audio signal to a transducer", in claim 2 and 21.

In response to applicant's arguments as stated above, the Examiner respectfully disagrees with the Applicant's argument. Katagishi teaches power amplifier in communication with the integrator to receive the audio signal and amplify said audio signal and transfer said amplified audio signal to a transducer (see figure 5, power amplifier 250, antenna 450, [0043]).

In response to applicant's argument that cannot combines Zinn with Shamlou, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Base on the above rational, it is believed that the claimed limitations are met by the combination of Zinn and Hamada and therefore, the rejection are still maintained.

### Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (571) 272-7499 and

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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December 12, 2005  
Examiner

Tuan Pham

